

part of U.S. Patent Application Serial No. 09/170,566 of B. Novich et al. entitled "Impregnated Glass Fiber Strands and Products Including the Same" filed October 13, 1998, now abandoned, which is a continuation-in-part application of U.S. Patent Application Serial No. 09/034,077 filed March 3, 1998, now abandoned; and (f) also a continuation-in-part of U.S. Patent Application Serial No. 09/170,565 of B. Novich et al. entitled "Inorganic Particle-Coated Glass Fiber Strands and Products Including the Same" filed October 13, 1998, now abandoned, which is a continuation-in-part application of U.S. Patent Application Serial No. 09/034,056 filed March 3, 1998, now abandoned.

REMARKS

I. Status of the Claims

Claims 1-37 are pending in this application. No claims have been cancelled by this response.

II. Objection to the Specification

In order to remove the alleged informalities identified by the Office, Applicants have amended the specification to include the status of the copending and parent applications referenced in the specification. Applicants submit that no new matter has been added by this amendment to the specification. Accordingly, the Office is respectfully requested to withdraw the objection to the disclosure.

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III. Rejection Under 35 U.S.C. § 112, first paragraph

The Office has rejected claims 1-37 under 35 U.S.C. § 112, first paragraph, because the specification “does not reasonably provide enablement for unexpected or superior results when any inorganic particle as embraced by the claims having a hardness value which does not exceed a hardness value of the at least one glass fiber.” Office Action at page 2.

Applicants respectfully traverse this rejection because they are not aware of any authority that requires the specification to provide evidence “for unexpected or superior results.” Rather, Applicants respectfully submit the test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation. *United States v. Telectronics, Inc.*, 857 F.2d 778, 785, 8 USPQ2d at 1404 (Fed. Cir., 1988).

Indeed, “[a] specification disclosure which contains a teaching of the manner and process of making and using the invention in terms which correspond in scope to those used in describing and defining the subject matter sought to be patented **must** be taken as in compliance with the enabling requirement of the first paragraph of Section 112 **unless** there is reason to doubt the objective truth of the statements contained therein which must be relied on for enabling support.” *In re Brana*, 34 U.S.P.Q.2d 1436, 1441 (Fed. Cir. 1995) (quoting *In re Marzocchi*, 169 U.S.P.Q. 367, 369 (C.C.P.A. 1971)); *Ex parte Bhide*, 42 U.S.P.Q.2d 1441, 1448 (Bd. Pat. App. Int. 1996). Only after the Office provides **evidence** showing that one of ordinary skill in the art would reasonably doubt the asserted utility does the burden shift to the applicant to provide rebuttal evidence to

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convince such a person of the invention's asserted utility. See *Brana* at 1441

(Emphasis added).

The MPEP, citing Federal Circuit law, is very specific with regard to the procedures Examiners must follow in order to establish whether there is sufficient evidence to support a determination that a disclosure does not satisfy the enablement requirement. A number of factors must be considered when making such a determination. These factors include:

- (A) The breadth of the claims
- (B) The nature of the invention
- (C) The state of the prior art
- (D) The level of one of ordinary skill;
- (E) The level of predictability in the art;
- (F) The amount of direction provided by the inventor;
- (G) The existence of working examples; and
- (H) The quantity of experimentation needed to make or use the invention based on the content of the disclosure.

These are known as the *Wands* factors, enunciated by the Federal Circuit in *In re Wands*, 8 USPQ2d 1400 (Fed. Cir. 1988). With regard to considering these factors, the MPEP is explicit:

It is improper to conclude that a disclosure is not enabling based on an analysis of only one of the above factors while ignoring one or more of the others. **The examiner's analysis must consider all the evidence related to each of these factors, and any conclusion of nonenablement must be based on the evidence as a whole.**

MPEP § 2164(a) (citing *In re Wands*, 8 USPQ2d at 1413) (emphasis added).

Applicants respectfully submit that the Office has failed to perform the analysis required by the MPEP and the Federal Circuit, and therefore has not met its burden of supplying evidence to support a determination that a disclosure does not satisfy the

enablement requirement. Moreover, Applicants submit the required analysis described above will lead to the conclusion that the specification is enabled for all inorganic particles within the scope of the presently claimed invention. Applicant therefore respectfully requests this rejection be withdrawn.

IV. Rejections Under 35 U.S.C. § 102(b)

A. *Terpay*

The Office has rejected claims 1-9 and 18-27 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,282,011 to *Terpay* (herein referred to as *Terpay*). The Office contends that this reference “teaches a fabric comprising a coated fiber strand comprising an aqueous coating applied to at least a portion of one glass fiber...said coating comprising a polymeric material such as epoxy or acrylic polymers....” Office Action at page 3.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *M.P.E.P.* § 2131. For at least the reasons that follow, Applicants respectfully submit *Terpay* fails to anticipate the claimed invention.

Terpay teaches a woven fabric wherein glass fibers and organic fibers alternate in the warp direction, resulting in a fabric of very low elongation and high strength under tensional forces. *Terpay*, col. 3, lines 9-10 and 17-20; claim 1. *Terpay* does not, however, teach an at least partially coated fiber strand comprising a plurality of glass fibers having a coating composition on at least a portion of at least one of the glass

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fibers, the coating composition comprising at least one coating comprising greater than 20 weight percent on a total solids basis of a plurality of particles as defined in claim 1.

Terpay, in contrast to Applicants' claim 1, is devoid of any teaching directed to the amount of particles that may be present in the compositions of the reference. The rejection does not contain an allegation that such a teaching exists in *Terpay*, nor do Applicants believe that such a teaching is present. Accordingly, *Terpay* cannot anticipate the claimed invention.

B. *Philipps*

The Office has rejected claims 1, 3, 8-20, 29, and 30¹ under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,312,569 to *Philipps* (herein referred to as *Philipps*). The Office alleges that this reference "teaches glass fibers in the form of fabrics, comprising a coated fiber strand comprising at least one glass fiber having a primary layer of a sizing composition applied thereto...." Office Action at page 4.

A rejection under § 102 is only proper when the claimed subject matter, in this case an at least partially coated fiber strand, is identically described or disclosed in the prior art. *In re Arkley*, 455 F.2d 586, 587 (CCPA 1972); see also M.P.E.P. § 706.02(a) ("For anticipation under 35 U.S.C. 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly."). In order to identically describe or disclose the claimed composition, the reference must direct those skilled in the art to the

¹ Applicants note that claims 29 and 30 were rejected. However, claim 28, upon which claims 29 and 30 depend, was not rejected. Clarification of this rejection is requested. However, to expedite prosecution, Applicants separately traversed the rejection of claims 29 and 30.

composition without any need for picking, choosing, and combining various disclosures in the reference not directly related to each other by the teachings of the cited reference. *Arkley*, at 587.

Applicants respectfully submit that *Philipps* does not identically describe or disclose the claimed invention. *Philipps*, throughout its specification, focuses on adhering particles to the surface of fibers. See, for example, Col. 2, lines 34-59, Col. 3, lines 25-29, Examples 1-5, and Claims 1 and 2. In contrast, claim 1 of the present invention is directed to an at least partially coated fiber strand. Because *Philipps* does not identically describe or disclose the claimed an at least partially coated fiber strand recited in claim 1, Applicants submit the reference fails to anticipate rejected claims 1, 3, and 8-20.

Turning to claims 29 and 30, Applicants respectfully submit that the glass fibers recited in these claims are not identically described or disclosed by *Philipps*. Claims 29 and 30 are directed to an at least partially coated fiber strand comprising a plurality of glass fibers having a coating composition on at least a portion of a surface of at least one of said glass fibers, the coating composition comprising, *inter alia*, a plurality of hollow organic particles having a Mohs' hardness value which does not exceed the Mohs' hardness value of the glass fibers. See Claim 28. *Philipps* fails to describe or disclose any hollow organic particles. Thus, *Philipps* cannot anticipate the invention recited in claim 28 and 29.

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IV. Information Disclosure Statement

An Information Disclosure Statement under 37 C.F.R. § 1.97(c) was filed on October 15, 2001. Applicants request that the documents listed therein be considered by the Office, and made of record in this application.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants respectfully request the reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

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THE APPENDIX TO THE AMENDMENTS OF FEBRUARY 4, 2002
Version with Markings to Show Changes Made

IN THE SPECIFICATION:

On page 1, substitute the paragraph which starts on line 6 with the following paragraph:

This application is a continuing application of (a) U.S. Patent Application Serial No. 09/620,523 of B. Novich et al. entitled "Inorganic Particle-Coated Glass Fiber Strands and Products Including the Same" filed July 20, 2000, now pending; (b) U.S. Patent Application Serial No. 09/620,524 of B. Novich et al. entitled "Inorganic Particle-Coated Glass Fiber Strands and Products Including the Same" filed July 20, 2000, now pending; (c) U.S. Patent Application Serial No. 09/620,525 of B. Novich et al. entitled "Inorganic Particle-Coated Glass Fiber Strands and Products Including the Same" filed July 20, 2000, now pending; and (d) U.S. Patent Application Serial No. 09/620,526 of B. Novich et al. entitled "Inorganic Particle-Coated Glass Fiber Strands and Products Including the Same" filed July 20, 2000, now pending, which are continuing applications of U.S. Patent Application Serial No. 09/5668,916 of Novich et al. entitled "Impregnated Glass Fiber Strands and Products Including the Same", filed May 11, 2000, now abandoned, which is a continuing application of U.S. Patent Application Serial No. 09/548,379 of B. Novich et al. entitled "Impregnated Glass Fiber Strands and Products Including the Same", filed April 12, 2000, now abandoned, which is a continuing application of U.S. Patent Application Serial No. 09/527,034 of Novich et al. entitled "Impregnated Glass Fiber Strands and Products Including the Same", filed March 16, 2000, now abandoned, which is (a) a continuation-in-part of International Application PCT/US99/21443 of B. Novich et al. entitled "Glass Fiber-Reinforced Prepregs,

Laminates, Electronic Circuit Boards and Methods for Assembling Fabric", with an international filing date of October 8, 1999, which is a continuation-in-part of U.S. Patent Application Serial No. 09/170,578 of B. Novich et al. entitled "Glass Fiber-Reinforced Laminates, Electronic Circuit Boards and Methods for Assembling a Fabric", filed October 13, 1998, now abandoned, which is a continuation-in-part of U.S. Patent Application Serial No. 09/130,270 of B. Novich et al. entitled "Glass Fiber-Reinforced Laminates, Electronic Circuit Boards and Methods for Assembling a Fabric", filed August 6, 1998, now abandoned, which is a continuation-in-part application of U.S. Serial No. 09/034,525 of B. Novich et al. entitled "Inorganic Lubricant-Coated Glass Fiber Strands and Products Including the Same" filed March 3, 1998, now abandoned; (b) also a continuation-in-part of U.S. Patent Application Serial No. 09/170,780 of B. Novich et al. entitled "Inorganic Lubricant-Coated Glass Fiber Strands and Products Including the Same" filed October 13, 1998, now abandoned, which is a continuation-in-part application of U.S. Patent Application Serial No. 09/034,525 of B. Novich et al. entitled "Inorganic Lubricant-Coated Glass Fiber Strands and Products Including the Same" filed March 3, 1998, now abandoned; (c) also a continuation-in-part of U.S. Patent Application Serial No. 09/170,781 of B. Novich et al. entitled "Glass Fiber Strands Coated With Thermally Conductive Inorganic Solid Particles and Products Including the Same" filed October 13, 1998, now abandoned, which is a continuation-in-part application of U.S. Application Serial No. 09/034,663 filed March 3, 1998, now abandoned; (d) also a continuation-in-part of U.S. Patent Application Serial No. 09/170,579 of B. Novich et al. entitled "Methods for Inhibiting Abrasive Wear of Glass Fiber Strands" filed October 13, 1998, now abandoned, which is a continuation-in-part

application of U.S. Patent Application Serial No. 09/034,078 filed March 3, 1998, now abandoned; (e) also a continuation-in-part of International Application PCT/US99/21442 to B. Novich et al. entitled "Impregnated Glass Fiber Strands and Products Including the Same", with an international filing date of October 8, 1999, which is a continuation-in-part of U.S. Patent Application Serial No. 09/170,566 of B. Novich et al. entitled "Impregnated Glass Fiber Strands and Products Including the Same" filed October 13, 1998, now abandoned, which is a continuation-in-part application of U.S. Patent Application Serial No. 09/034,077 filed March 3, 1998, now abandoned; and (f) also a continuation-in-part of U.S. Patent Application Serial No. 09/170,565 of B. Novich et al. entitled "Inorganic Particle-Coated Glass Fiber Strands and Products Including the Same" filed October 13, 1998, now abandoned, which is a continuation-in-part application of U.S. Patent Application Serial No. 09/034,056 filed March 3, 1998, now abandoned.